

What is claimed is:

1. A semiconductor waste gas processing device comprising:

a flame path through a waste gas combustion chamber, a head section on a top of the waste gas combustion chamber, and a waste gases outlet; the flame path further comprising:

at least one fuel spray ring; each fuel spray ring having a respective fuel room formed in the head section and being connected to a fuel source line for supplying fuel gas; a secondary flame ring of each fuel spray ring having a plurality of secondary flame apertures;

a tapered flame jet which is communicable with the waste gas combustion chamber being formed in a lower end of the flame path, and

an igniter being installed in the flame path.

2. The semiconductor waste gas processing device with a flame path as claimed in claim 1, wherein a plurality of pure oxygen outlet holes are formed in the waste gases outlet.

3. The semiconductor waste gas processing device with a flame path as claimed in claim 1, wherein the secondary flame ring and the plurality of secondary flame apertures have plane shapes or tapered shapes.

4. The semiconductor waste gas processing device with a flame path as claimed in claim 1, wherein an internal of the flame jet is formed with a flame capture area.

5. The semiconductor waste gas processing device with a flame path as claimed in claim 1, wherein an annular water room is formed in the periphery of the fuel room in the head section; and a bottom of the water room is installed with a plurality of water spray apertures so that the plurality of water spray apertures are communicable to the waste gas combustion chamber.

6. The semiconductor waste gas processing device with a flame

path as claimed in claim 5, wherein a periphery of the water room is formed with an annular air room; a bottom of the air room is formed with a plurality of air spray apertures which are aligned to the outlet of the water spray aperture for communicating with the waste gas combustion chamber.

7. The semiconductor waste gas processing device with a flame path as claimed in claim 1, a flame jet of the head section is installed with a fire jetting sleeve.

8. The semiconductor waste gas processing device with a flame path as claimed in claim 7, wherein the fire jetting sleeve is formed with a plurality of flame apertures which are connected to respective fuel source line for receiving fuel gas.

9. The semiconductor waste gas processing device with a flame path as claimed in claim 7, wherein the fire jetting sleeve is formed with a plurality of flame apertures which are connected to respective fuel source line; and the fuel source line is communicated to the fuel room for receiving fuel gas.

10. The semiconductor waste gas processing device with a flame path as claimed in claim 1, wherein a center of the head section is formed with a nitrogen path; an inlet of the nitrogen path is connected to a nitrogen source line and an outlet thereof is inserted into a waste gases path at an upper edge of the waste gases outlet.

11. The semiconductor waste gas processing device with a flame path as claimed in claim 1, wherein a temperature probe is installed in the flame path.